

2024



AP[®] Seminar

Free-Response Questions

Set 2

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Part A

Read the following passage and then respond to prompts A1, A2, and A3.

- A1. Identify the author’s argument, main idea, or thesis. (3 points)
- A2. Explain the author’s line of reasoning by identifying the claims used to build the argument and the
- A3. Evaluate the effectiveness of the evidence the author uses to support the claims made in the

From “Nuclear Could Be the Clean Energy Source the World Needs”

By Katie Tubb (*The Heritage Foundation*, September 17, 2019)

The challenge to meet the world’s energy needs is massive. Demand for electricity continues to grow, with nearly one billion people today still in the dark. Access to affordable, reliable, clean energy has sweeping ramifications for economic opportunity, education, clean and reliable health care, safe homes, communication—things Americans can happily take for granted.

There is a clean option that could meet this challenge: Nuclear energy. While nuclear energy has battled persistent [public relations] problems in the past, things seem to be changing—and rightly so.

Last year, the Clean Energy Ministerial (CEM), an annual gathering of energy ministers from 26 countries and the European Commission, included nuclear energy as a clean energy source for the first time and launched an initiative to encourage other energy organizations to do the same. According to CEM, nuclear can further “economic growth and effective environmental stewardship.” ...

[T]he Massachusetts Institute of Technology, in partnership with Idaho National Lab and the University of Wisconsin, have gone so far as to say nuclear energy is “essential” to expand energy access and reduce greenhouse gas emissions.

There are good reasons these organizations have come to see nuclear energy as “clean.”

[According to the US Energy Information Association], in the United States, 19% of the electricity Americans use comes from 97 nuclear reactors, more than in any other country. The World Nuclear Power Association counts 444 commercial nuclear power reactors operating globally, with another 54 under construction and 111 planned, most notably in China, India and Russia. The gigawatts of electricity produced for millions of people by these reactors has emitted no air pollutants.

Nuclear power is also clean in the sense that it produces a lot of energy for its small physical footprint. A single nuclear reactor uses ¹ about 13 acres of land space per megawatt, compared to wind (71 acres), solar (44 acres) and hydro (315 acres). This includes land used for mining, transportation, transmission

and storage. Put another way, a solar farm would need roughly 45 square miles of land to produce the same amount of electricity as an average nuclear power plant, and a wind energy farm would need roughly 260 square miles [, according to the Nuclear Energy Institute].

Wind and solar energy enjoy a much better reputation as clean energy sources and also have benefits like zero emissions energy. However, they both require favorable weather conditions and backup power to be online in case weather doesn't cooperate. US Energy Information Association reports that nuclear reactors are online and generating power 93% of the time, compared with wind (37%) and solar (26%). And while most nuclear power plants in the United States are licensed to operate for 60 years, ² the operating life of renewables is roughly half as long. ³

Like every energy resource, nuclear power does have its tradeoffs. But even in those, reality is far better than public perceptions of nuclear energy.

Perhaps first among people's concerns are the infamous accidents at Chernobyl, Three Mile Island and Fukushima. It may be hard to believe, but no one has died from radiation exposure from the latter two. ⁴ In the case of America's worst nuclear accident at Three Mile Island in 1979, actual radiation exposure for the 2 million people living closest to the reactor amounted to less than a dental x-ray. For decades, state and federal agencies and private companies tested agricultural, health and environmental factors, finding nothing of concern, as reported by the US Nuclear Regulatory Commission....

[T]he accident at Chernobyl in 1986 resulted from an egregious, unethical Soviet experiment. The Chernobyl reactor also lacked important safety features, like containment domes, common to all US reactors. So far, the UN has confirmed ⁵ 43 deaths from radiation at Chernobyl, considered the worst nuclear accident in history....

But fear has caused unnecessary environmental harm and costs. While visiting Fukushima, founder of Environmental Progress Michael Shellenberger challenged the Japanese government's colossal efforts to remove thousands of tons of "contaminated" topsoil. The response he got was shockingly frank: "Every scientist and radiation expert in the world who comes here says the same thing. We know we don't need to reduce radiation levels. ... We're doing it because the people want us to."

Among other concerns is nuclear waste. There are 81,500 tons of nuclear waste from commercial power reactors in the United States. That represents all the nuclear waste from every commercial reactor in the United States since 1957—no more than a football field 10 yards deep. ⁶ For reference, the International Renewable Energy Agency estimates the United States will have 170,000 to one million tons of waste from solar panels by 2030. While the politics of nuclear waste management have bogged down in the United States, it is a technically solvable challenge. The nuclear industry in Finland, for instance, is showing the world how it can be done by building a deep geologic repository to permanently isolate waste from people and the environment.

The point is not that nuclear power is perfect...[b]ut nuclear power has some incredible benefits that make it a choice well worth considering as a clean energy option to improve our environment and make the world better.

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¹ Stevens, Landon, et al. “The footprint of energy: land use of US electricity production.” STRATA: Logan, UT, USA (2017).

² United States Nuclear Regulatory Commission

³ The National Renewable Energy Laboratory (U.S. Department of Energy)

⁴ Kharecha, Pushker A., and James E. Hansen. “Prevented mortality and greenhouse gas emissions from historical and projected nuclear power.” *Environmental Science & Technology* 47.9 (2013): 4889-4895.

⁵ Ibid.

⁶ The Nuclear Energy Institute

Part B

Read the **four** sources carefully, focusing on a theme or issue that connects them and the different perspective each represents. Then, write a logically organized, well-reasoned, and well-written argument that presents your own perspective on the theme or issue you identified. You must incorporate at least **two** of the sources provided and link the claims in your argument to supporting evidence. You may also use the other provided sources or draw upon your own knowledge. In your response, refer to the provided sources as Source A, Source B, Source C, or Source D, or by the author’s name.

Source A**From “Home Truths: An Anthropology of House and Home”**

By Dr. Francine Barone (*Human Relations Area Files*, Yale University, December 12, 2019)

We can begin ... by offering a simple, everyday reckoning of a house: a building intended to provide shelter for human habitation; typically holding possessions as well as persons; decorated and spatially designated in both interior and exterior; by which an otherwise empty space is transformed into a residential one. Some societies—readily recognizable as the norm in the West—may value the privacy of the house as an intimate space for nuclear families, with distinct rooms each serving a purpose, and a strong locking door to separate the exterior/“street” from the interior/“home” (Barone 2010).

Yet the establishment of a house (and, as will be shown below, a home) is not always strictly a family affair. It takes place within wider inhabited surrounds, and the spatial layout and design of the dwelling vis-à-vis neighbors is a fundamental building block of the social landscape. Some societies may orientate their houses towards a communal center (see, for example, Kroeber 1917: 153), with fewer restrictions on hospitality for more extended familial connections or other visitors. In this way, the radius of residence of a house can become rather fuzzy, and its boundaries semi-permeable, when open to other community members and their shared responsibilities or co-dependencies. ...

Two examples from the Middle East ... illustrate the juxtaposition of “private” vs. “public” spaces as entwined with the concept of home. Beeman describes how Iranian culture, until recently primarily a rural one, continues to value nature and the open air in residential spaces despite rapid urbanization in the early 2000s:

“Because Iran is largely a desert, however, the ideal open space is a culturally constructed space—a garden. Iranians will try to bring the outdoors inside whenever possible.” ...

The impression of the Iranian house is one where living together and sharing spaces is as fundamental to the home as is the careful intention given to curating the space, quite literally from the outside in. The everyday activities of eating, sleeping, and entertaining are key criteria in the life of a home, whether a

single room or a larger structure. Here, then, one can argue that “home” is a composite of the building itself and the life that unfolds within it. Thus, the interior of the house represents the heart of the home and is a safe space for the most “unguarded” and relaxed behavior.

In Susurluk culture in Turkey, attention is also put on safety and sanctity; yet in Turkish society, this requires a communal solidarity that by necessity extends well beyond the walls of a single house: Primary concerns of all Susurluk households are the sanctity of the home and the safety of their women and children. One indication of these concerns is the enclosed courtyard characteristic of older homes; another is the solidarity that members of an immediate neighborhood display to the outside. In effect, the immediate neighborhood is a shared extension of all the households whose women and children participate in its use. Consequently, throughout Susurluk groups of neighboring households have united to form what may be termed “defended neighborhoods”—spatial units within which neighbors cooperate to maintain a degree of security for their members which is relatively high in comparison to adjacent areas (Magnarella 1974: 43).

Such informal spatial arrangements have developed in Susurluk society in response to a potentially volatile and conflictive external environment, or “perceived fears of invasion from the outside” (ibid). Those bonding together and thereby traversing the boundaries of individual dwellings may not be related through kinship or even ethnicity, but are connected via an impetus to act together to safeguard the domestic privacy and sanctity of family that define a Turkish home.

Barone, F. 2019. "Home Truths: An Anthropology of House and Home", HRAF, Yale University.

<https://hraf.yale.edu/home-truths-an-anthropology-of-house-and-home/>

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Source C**From “The Psychology of Home Environments: A Call for Research on Residential Space”**

By Lindsay T. Graham, Samuel D. Gosling, and Christopher K. Travis (*Perspectives on Psychological Science*, Vol. 10(3), 346-356, 2015)

Theorists ranging from Carl Jung (e.g., 1963) to Clare Cooper-Marcus (e.g., 1995) have proposed that of all places, the home has a particularly powerful symbolic and psychological significance. That is, the home is more than a place in which an individual resides but rather a unique place where a person’s past, present, and future selves are reflected and come to life. On the basis of a series of interviews with home owners, Cooper-Marcus (1995) argued that the home is a place that reflects the character and identity of those who dwell within it. ...

Some architectural practitioners have speculated about the motives that may drive how a home’s appearance is shaped. Israel (2003) argued that individuals’ home environments are reconstructions of past spaces in which those people felt safe and secure. According to this view, a person may, for example, unconsciously incorporate features into a space that evoke qualities from a well-loved grandmother’s home. The motives behind these decisions may be propelled not by conscious tastes and preferences but rather by the emotional connections promoted by these elements.

Gosling has proposed that manipulating one’s space can serve three broad functions (Gosling, Gifford, & McCunn, 2013; Gosling, Ko, Mannarelli, & Morris, 2002). First, features of a space can influence the activities likely to be performed in that space—thanks to the physical features of kitchens, bedrooms, living rooms, and garages, these spaces are particularly well suited to cooking, sleeping, entertaining guests, and parking, respectively. The layout and other physical features of the space can influence the activities (e.g., reading a book) or social interactions (e.g., chatting with friends) that take place in the space, which in turn may affect cognitive and emotional states of the occupants (e.g., a sense of creativity or relaxation). ...

Second, the items in a space and their arrangement can be used to convey impressions to others; thus, for example, occupants can convey the importance that they place on family by displaying photos of their relatives or can communicate their political orientation via symbols and icons. ...

Third, features of the space can affect what people think about and how they feel when in that space; for example, mementos may evoke fond memories of other times, places, and people. The presence of personal and cultural artifacts (e.g., art, photos, furniture) can influence levels of well-being and feelings of social support (Gifford, 2007). For instance, people may use photos of loved ones and other “social snacks” (tangible reminders of connections to others) to fend off feelings of loneliness and social isolation (Gardner, Pickett, & Knowles, 2005).

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Source D

From “The problem with being a long-term expat”

By Kate Mayberry (*BBC*, October 24, 2016)

Expats¹ too often underestimate the transformational aspect of living overseas for an extended period. “Living and working abroad can change the employee and their family members profoundly, and in a way they could never anticipate,” says Jenny Castelino, director of intercultural sales and account management at Cartus.

Although jobs may be a factor in the decision to repatriate, particularly in these troubled economic times, many expats return to their homeland to be closer to family.

It’s the reason conservation biologist Mei-Ho Lee, 39, returned to Malaysia in 2009 after a decade in the United States.

While Lee had prepared for her return for a year, the emotional upheaval still came as a shock. For the first few months, she retreated to her parents’ house, swapping the chaos and noise of New York and her laboratory at Columbia University for the slower-paced city of Ipoh in northern Malaysia.

“The first few weeks were like hibernating,” she remembers. Then, once her job was confirmed, she moved to Kuala Lumpur, Malaysia’s busy and congested capital. . . .

“Kuala Lumpur was a completely different place to what it had been before. I couldn’t recognise anything; any roads at all. And I didn’t have a car so it was very difficult. I missed the public transport in New York.”

Working practices in her homeland also came as a shock. “I have to switch to Asian mode,” says Lee.

Third Culture Kids

And then there are the expat children.

Karen, a British citizen now in Malaysia, who prefers to be known only by her first name because her husband works for a large multinational, recalls their 22 years on the road became more difficult as their children got older. Both are now at university in the UK. Having never lived in Malaysia, they don’t see it as home, and their actual home in Europe is rented out. “Their home is out of a suitcase,” Karen says.

American sociologist Ruth Hill Useem coined the term Third Culture Kids (TCK) to describe children who’d spent much of their formative years outside their own country. Her research was triggered by the experience of her own children growing up in India, where she was posted on a research project in the 1950s. A typical TCK will tend to have multiple answers to the question of where they’re from, friends from numerous countries and, often, the ability to speak more than one language.

Maffini describes her children as “resilient” but says they’d probably be hard-pushed to define the idea of home. She has written a book, *Sammy’s Next Move*, to help guide other children through the realities of a life on the move, and the notions of home and identity. The main character is a snail who takes his home with him wherever he goes.

“The problem with being a long-term expat” by Kate Mayberry, from BBC. © 2016, BBC.

¹ people who live outside their native country